

## ABSTRACT OF THE DISCLOSURE

5        An automatic gain controller (AGC) and method for use in a digital TV receiver having an IF  
amplifier, an RF amplifier, an analog to digital converter (ADC) connected to the IF  
amplifier, and a demodulator connected to the ADC, the AGC comprising: an input selector  
for selecting as feedback signal one of a digitized IF signal output of the ADC and a  
demodulated signal output of the demodulator; a signal detection unit for detecting the  
10       conditions of the feedback signal and outputting status signals; and a traffic controller for  
receiving the status signals and outputting control signals based on the status signals to an IF  
gain controller and an RF gain controller for independent gain control of the RF amplifier  
and the IF amplifier. The AGC and method further including hysteresis-curve-based  
switching for alternatively halting adjustments to IF gain while adjusting RF gain or halting  
15       adjustments to RF gain while adjusting IF gain.